



BOROUGH OF JARROW.

ANNUAL REPORT

OF THE

Medical Officer of Health

for 1909.

BY

J. M. NICOLL, M.B., C.M., EDIN.

JARROW-ON-TYNE :

"GUARDIAN" PRINTING WORKS, WALTER STREET.

—
1910.

To the Chairman and Members of the Sanitary Committee.

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GENTLEMEN,

I again beg to present you with my Annual Report on the health of the Borough.

Taken as a whole, this for the year has been fairly satisfactory, and compares favourably with that of recent years, the only exception being our infantile mortality rate, which shows a considerable increase as compared with the past two years.

I am, Gentlemen,

Your, obedient servant,

J. M. NICOLL.

Jarrow, February 14th, 1910.

Vital Statistics, 1909.



PHYSICAL FEATURES AND INDUSTRIES OF BOROUGH.

The Town is situated on the South side of the River Tyne, occupying a river frontage, including that of the Slake of 5,600 yards or 3 miles. It extends Southwards from the river for about 1,800 yards, its total area being 1,064 acres, of which 158—the Slake—are under water. The River Don on entering the Tyne at Jarrow Slake forms here its Eastern and part of its Southern boundary, which is continued by the County Borough of South Shields and the South Shields Rural District, the Western boundary being the Hebburn Urban District. The general contour of the district is slightly undulating, with a maximum rise at its Southern-most part at Monkton of 101 feet, to 14.7 feet in the North, above sea water level. From West to East, this rise varies from 83 feet in the West to 15 feet in the East. The slope towards the river is greatest in the centre of the town, shading off gradually towards both East and West. The North-Eastern Railway line, between Newcastle and South Shields, runs parallel to the river, through about the centre of the town, dividing it roughly into a North and South portion. The subsoil is generally of clay, but owing to the natural drainage towards the river, there is as a rule, no great amount of stagnant water, or undue dampness.

The town is entirely a working-class one, there being no residential suburbs. The work is almost solely in connection with the shipbuilding industry, besides which to a much lesser degree there are ship repairing, blast furnaces, steel works, engine works and paper making, etc. The exposed and often arduous nature of the work is shown by the high mortality from diseases of the Respiratory System and from Heart Disease.

During the year there were only 10 self-contained and 5 tenements of two flats each, built in the Borough, these being in the South and Grange Wards.

POPULATION.

Estimated to mid-year, our population amounts to 34,815, the Ward population being calculated as follows:—

North	.....	5,030
South	.....	7,020
East	.....	5,110
West	.....	6,065
Grange	.....	5,720
Central	.....	5,870
		<hr/>
		34,815
		<hr/>

BIRTHS.

There were 1,024 births registered during the year, giving a birth-rate of 29.4 per 1,000 of the population, this being the lowest recorded rate for the Borough. As compared with last year, when the rate was 33.4, there are 135 fewer births. Thirty-four of the births were registered as illegitimate, being 3.3 per cent. of the total as compared with 3 per cent. last year.

Of the births 529 were males, and 495 females.

For the decennial period 1899-1908, the average number of births registered has been 1164, the average rate for the period being 33.7.

According to statistics, for which I am indebted to Dr. Hill, the County Medical Officer of Health, the birth-rate for the county is 35.5, with a mean rate of 35.4 for previous ten year period. For England and Wales the rate is 25.6; for the great towns 25.7, and for the smaller towns 24.8.

In the following table our average birth-rates for the three decades 1871-1900, are shown as well as those for the last nine years.

Birth-Rates (Jarrow), per 1,000 of the estimated population:—

Mean, 1871-80	...	...	...	...	...	45.2
„ 1881-90	...	...	...	...	...	40.3
„ 1891-1900	...	...	...	...	...	34.7
1901	...	...	...	...	...	34.1
1902	...	...	...	...	...	36.0
1903	...	...	...	...	...	34.7
1904	...	...	...	...	...	31.4
1905	...	...	...	...	...	32.6
1906	...	...	...	...	...	32.0
1907	...	...	...	...	...	33.3
1908	...	...	...	...	...	33.4
1909	...	...	...	...	...	29.4
Mean, 1899-1908	...	...	...	...	...	33.7

DEATHS.

There were 516 deaths registered, as having occurred within the Borough. There were 67 registered, of residents outside the Borough. There were five deaths of non-residents, which occurred, four at the Floating Hospital, Jarrow Slake; and one at the Palmer Memorial Hospital; excluding these we have a total of 578 deaths, equivalent to a death-rate of 16.6 per 1,000 per annum, as compared with 16.1 for the last two years. This is one of the lowest recorded rates, as apart from the previous two years, it has only once been lower, in 1894, when it was 16.4. Compared with the average of the previous ten year period, 1899-1908, there is a marked reduction. For that period the average number of deaths has been 632, giving an average rate of 18.3.

Seventy-two of the deaths, equal to 12.3 per cent. of the total, occurred in public institutions. These were 56, at Harton Workhouse, 9 at Sedgefield Lunatic Asylum, 4 at the Floating Hospital, and 3 at Palmer Memorial Hospital. Of these institutions, the first two are outside the Borough, whilst the other two are inside. There is also included one death of a resident registered at High Barnes and another at Sunderland.

Of the 583 deaths, 293 were males and 290 females, a proportion of 1,010 males to every 1,000 females.

For the county, the death-rate is 15.7 as compared with 17.5 last year, the average rate for the previous ten years being 17.9. For England and Wales, the rate is 14.5, for the large towns 14.7, and for the smaller towns 13.9.

In the following table, the average death-rates occurring since 1871 are shown and contrasted.

Death-Rates (Jarrow), per 1,000 of the estimated population:—

Mean, 1871-80	...	...	...	...	...	23.9
„ 1881-90	...	...	...	...	...	21.1
„ 1891-1900	...	...	...	...	...	19.4
1901	...	...	...	...	...	19.1
1902	...	...	...	...	...	19.7
1903	...	...	...	...	...	17.7
1904	...	...	...	...	...	18.6
1905	...	...	...	...	...	17.1
1906	...	...	...	...	...	18.0
1907	...	...	...	...	...	16.1
1908	...	...	...	...	...	16.1
1909	...	...	...	...	...	16.6
Mean, 1899-1908	...	...	...	...	...	18.3

It will be noticed that the death-rate shows a gradual but steady decline.

Coroner's Inquests were held in 21 instances, as compared with 29 last year, the percentage to the total deaths being respectively 3.6 and 5.1.

Uncertified Deaths.—There were 32 deaths returned as Uncertified, equal to 5.4 per cent. Of these, sixteen related to infants under 1 year. As previously pointed out, most if not all of these deaths, are registered under informal certificates given by a duly qualified practitioner. Last year there were 27 returned as uncertified equal to 4.8 per cent.

The National Increase of the Population, or the number of births in excess of deaths is 446, as compared with 599 last year, and 597 the year previous.

The Seasonal Prevalence of Disease is shown in the following table, where the general death-rate, the Zymotic death-rate, also that for Phthisis and Diseases of the Respiratory System, excluding Phthisis, as well as the Infantile Mortality Rate, are shown separately for each quarter of the year.

Quarterly Death Rates per 1,000 of the Population.
(Jarrow).

	Total Death-rate.	Zymotic Death-rate.	Phthisis Death-rate.	Disease of Respiratory System excluding Phthisis Death-rate.	Infantile Mortality rate
First Quarter	19.18	1.49	1.49	4.48	164
Second Quarter	19.41	2.18	1.49	5.17	140
Third Quarter	11.48	1.14	1.03	2.41	103
Fourth Quarter	16.31	0.68	1.03	5.28	185
Year	16.60	1.37	1.26	4.33	148

It will be noticed that the general death-rate for the first two quarters was very much higher than the average for the year, being as high as 19.4 in the second quarter. This was largely due to Bronchitis and Pneumonia, there being 40 deaths, due to these causes, during the months of April and May. In these months also, the Zymotic Mortality was exceptionally high, there being no less than 15 deaths, chiefly due to Measles and Whooping Cough. The death-rate for the third quarter is exceptionally low for this period of the year. The Zymotic Mortality was also highest in the second quarter, due to the diseases already mentioned. It was lowest in the last quarter of the year, 0.68; there being no Zymotic deaths at all during the month of October. For Phthisis the rate was 1.49 for the first two quarters, and 1.03 for the last two. For disease of the Respiratory System, excluding Phthisis, the rate was lowest in the third quarter—2.41, and highest—5.28 in the last quarter of the year. The Infantile

Mortality Rate varied from 103 in the third, to 185 in the last quarter, the high rate of this quarter being mostly due to Inflammatory Lung Disease

INFANTILE MORTALITY.

There were 152 deaths registered of infants under one year of age, constituting 26.2 per cent. of our total mortality. This is one more than in the previous year, when the mortality per cent. was 26.9. Of children under five years of age there were 242 deaths registered, equal to 41.8 per cent. of the total, as compared with 225 last year, giving a percentage of 40.1.

The Infantile Mortality Rate, or the number of deaths, under one year, to every 1,000 registered births, is 148 as compared with 130 last year, and 121 the year previous. It may be pointed out, that though there was only one more death this year than last, of infants under one year of age, that the Infantile Mortality Rate is 18 higher, owing of course to the very much less number of births registered. For the 10 year period, 1899-1908, the average Infantile Mortality Rate is also 148, though the average number of deaths for that period amounts to 173. For the county the rate is 124, as compared with 151 last year, whilst for the previous ten year period the rate is 159. For England and Wales the rate is 109, for the great towns 118, and for the smaller towns 111.

Causes of Death in Infants under One year of age (Jarrow):

Whooping Cough	...	...	...	5
Diarrhoea	...	...	...	4
Measles	...	...	...	4
Diphtheria	...	...	...	1—14
Congenital Debility, etc.	...	...	...	39
Premature Birth	...	...	...	25
Bronchitis	...	...	...	24
Pneumonia	...	...	...	22
Tubercular Disease	...	...	...	10
Syphilis	...	...	...	5
All other causes	...	...	...	13—138

As compared with last year there is only one more death, there being seven less from Zymotic Disease, but eight more from other causes. There is a very considerable increase in the number of deaths from Congenital Debility, Bronchitis and Pneumonia as compared with last year. Probably the climatic conditions, cold and damp, prevailing throughout the greater part of the year, as well as the almost total absence of warmth and sunshine during the summer, may be held responsible for the increase in some of these diseases. There is, however, another factor which I believe has had a very large share in causing or contributing towards the increase of these and infantile mortality generally, and that is the prolonged want and privation which has for such a lengthy period prevailed in the Borough, and which has unfortunately affected a very large proportion of our community.

The detail of these deaths will be dealt with under Fatal Diseases. For the various other causes of Infantile Mortality see Table V. of Appendix.

In the following table, the Infantile Mortality Rates and Averages are shown for the periods mentioned.

Infantile Mortality Rates (Jarrow):—

Mean, 1871-80	...	...	...	...	...	175
„ 1881-90	...	...	...	...	...	152
„ 1891-1900	...	...	...	...	...	158
1901	...	...	...	...	...	158
1902	...	...	...	...	...	145
1903	...	...	...	...	...	154
1904	...	...	...	...	...	154
1905	...	...	...	...	...	143
1906	...	...	...	...	...	148
1907	...	...	...	...	...	121
1908	...	...	...	...	...	130
1909	...	...	...	...	...	148
Mean, 1899-1908	...	...	...	...	...	148

FATAL DISEASES.

In the following table the chief causes of death for the years mentioned are shown and contrasted.

Fatal Diseases, 1907-8-9:—

DEATHS.	1907	1908	1909
All Causes	560	560	578
The Seven Principal Zymotic Diseases ...	31	46	48
Smallpox ... ..	...	...	...
Measles	2	8	12
Scarlet Fever	4	1	1
Diphtheria, including Membranous			
Croup	4	4	9
Whooping Cough	2	4	20
"Fever"	4	2	1
Diarrhoea	15	27	5
Septic Diseases	12	8	10
Phthisis	53	49	44
Bronchitis, Pneumonia &c.	142	115	151
Heart Disease	46	50	49
Injuries	22	21	13
All Other Causes	565	271	263

In considering the principal fatal diseases reference should be made to Tables IV. and V. of Appendix. They will be considered in the order of their fatality, those occurring from Zymotic diseases being dealt with under that heading.

PNEUMONIA.

This is again the most fatal disease, accounting for 82 deaths, equals to over 14 per cent. or one-seventh of the whole. Of these 82 deaths, 22 or rather more than one-fourth were in infants under one year of age. Of children between 1 and 5 years there were 28 deaths, the next heaviest mortality being in the age period—25-65 years—when there were 19 deaths from this cause. The following is the Ward Mortality:—Central, 25; West, 16; East, 15; North, 14; South, 8; Grange, 4.

TUBERCULAR DISEASE.

Next to Pneumonia, Tubercular Disease in its various forms was the most fatal, accounting for 79 deaths, forty-four of which were due to Phthisis, and thirty-five to other tubercular affections. Of the 44 deaths from Phthisis 4 were in children between 1 and 5 years, 3 in the age period 5-15 years, 11 in period from 15-25 years, 25 in period 25-65 years, and 1 over 65 years of age. For the other forms of Tubercle, the ages at death were as follows:—Under 1 year, 10; 1-5 years, 14; 5-15 years, 4; 15-25 years, 2; 25-65 years, 4; over 65 years, 1. The death-rate from Phthisis is 1.2 as compared with 1.4 last year. For the county the rate is .91 as against .95 last year. For Tubercular Disease, other than Phthisis, the death-rate is 1.0, that for the county being .73.

Public Health (Tuberculosis) Regulations, 1908.—This Act came into force from January 1st, 1909. By it all Medical Officers of Poor Law Institutions are obliged to notify to the Medical Officer of Health of the district from which the patient came, any case of Phthisis occurring in an inmate of the Institution. To also Superintending Officers of Poor Law Institutions, are obliged to notify to the Medical Officer of Health the name and intended address of any inmate suffering from Phthisis who leaves the Institution. Poor Law, District Medical Officers, have also to notify all cases of Phthisis occurring in poor law patients to the Medical Officer of Health of the district in which they occur. This entails a good deal of cross or reduplicate notification, as for instance, a poor law patient may be notified by the District Medical Officer, and if removed to a poor law institution, it is again notified by the Medical Officer of the Institution. Besides a good number of these people keep moving about from one address to another and from one institution to another, each change if medical assistance is required, entailing a fresh notification. As an instance of this, there was one person regarding whom no less than eight notifications were received within five months. This, of course, is the exception, but two, three or four notifications regarding one patient is not at all uncommon. Again we have, on more than one occasion, failed to find any trace of the person at the address given on their leaving the Workhouse. There were 24 cases notified by the Poor Law Medical Officers during the year, and 9 under our voluntary notification, two of the latter being also notified, under the Regulations, as already pointed out in these Reports, voluntary notification has been anything but a success. How far good results is likely to be obtained from the other, is owing to a variety of reasons, yet premature to say.

All the cases brought under our notice were visited by the Sanitary Authority, and detailed instructions—printed—are left both for patient and those nursing or coming in contact. The Corporation acquired another bed at the Stanhope Sanatorium, and seven patients were admitted there during the year.

BRONCHITIS.

There were 61 deaths from this cause, as compared with 41 last year, an increase of 50 per cent. Of these 61 deaths, 24 were in infants under one year, and 29 in persons over 25 years of age. The Ward Mortality was as follows:—North, 20; East, 10; Central, 10; South, 9; West, 8; Grange, 4.

HEART DISEASE.

From the various forms of heart affections there were 49 deaths registered, being one less than last year. Thirty-one of

the 49 occurred in the age period—25-65 years— and 14 in persons over 65 years of age. The Ward Mortality is:—Central, 10; South, 9; Grange, 9; North, 8; East, 8; West, 5.

CONGENITAL DEBILITY.

From this cause there were no fewer than 39 deaths, or slightly over one-fourth of our total Infantile Mortality. Of these thirty-nine, 17 died within the first week, 10 more within the first month, and of the remaining 12 only one lived to six months. The Ward Mortality is as follows:—East, 9; South, 8; West, 7; Central, 7; North, 5; Grange, 3.

APOPLEXY.

Under this is included deaths from Cerebral Hæmorrhage, Hemiplegia, Cerebral Thrombosis, etc. From these various causes there were 36 deaths as compared with 38 last year. Twenty of these deaths occurred in the age period—25-65 years—and sixteen over 65 years. The Ward Mortality is:—West, 11; South, 9; North, 7; Grange, 5; Central, 3; East, 1.

CANCER.

Under this is included all forms of malignant disease. There were 25 deaths as compared with 19 last year. Eight were over 65 years of age, the remainder being over 25 years. The Ward Mortality was:—South, 8; Central, 5; Grange, 4; North, 3; East, 3; West, 2.

PREMATURE BIRTH.

From this there were 25 deaths registered as compared with 22 last year. Of these twenty-five deaths, only one reached the age of one month, whilst 20 died within one week of birth. The Ward Mortality is:—South, 7; Central, 7; West, 4; East, 3; North, 3; Grange, 1.

ACCIDENTS.

This included deaths from all sorts of violence, such as drowning, overlying, etc. There were 13 deaths from such causes as compared with 21 last year.

For further detailed information as to the causes of death during the year, I beg to refer you to Tables IV., V. and VI. of Appendix.

ZYMOTIC DISEASE.

Infectious Diseases Notification Act.

Infectious Diseases Notification Act.—Including Phthisis, there were 126 cases of Infectious Disease notified at the Health Office, as compared with 101 last year and 142 the year previous. As compared with last year, there is a very considerable decrease in the number of cases of Scarlet Fever, whilst Phthisis and Enteric Fever show an increase, the increase in the former being due to the Public Health (Tuberculosis) Regulations, 1908, coming into operation. The following are the notifications for the year:—Phthisis, 31; Scarlet Fever, 27; Erysipelas, 23; Diphtheria, 22; Enteric Fever, 16; Membranous Croup, 5; Puerperal Fever, 2. For further details see Tables III. and VII. in Appendix.

Zymotic Mortality.—There were 48 deaths caused by Zymotic Disease, as compared with 46 last year, the Zymotic death-rate being 1.37, as against 1.32 last year. These deaths were due:—20 to Whooping Cough, 12 to Measles, 5 to Diphtheria, 4 to Membranous Croup, and 1 each to Scarlet and Enteric Fever.

For the county the rate is 1.61 as against 2.70 for the previous year. For England and Wales the rate is 1.12; for the large towns 1.42, and for the smaller towns 1.08.

In the following table the deaths from Zymotic Disease and the months in which they occurred are shown.

Zymotic Diseases. Deaths from and months in which they occurred:—

Month.	Diarrhoea.	Measles.	Whooping Cough.	"Fever."	Diphtheria including Membranous Croup.	Scarlet Fever.	Smallpox.	Total.
Jan.	...	..	1	...	1	...	...	2
Feb.	...	3	1	...	4	..	...	8
March	...	...	3	...	...	...	...	3
April	...	6	1	...	...	1	...	8
May	...	2	4	1	..	...	...	7
June	...	1	3	..	...	...	...	4
July	1	...	4	...	..	...	...	5
August	1	...	1	...	..	...	...	2
Sept.	1	...	...	...	2	..	...	3
October	...	...	...	...	2	...	...	...
Nov.	1	...	1	...	2	...	...	4
Dec.	1	...	1	2	...	...	...	2
Year	5	12	20	1	9	1	...	48

It will be noted that October was the only month in which there was no Zymotic Mortality; whilst the months of February, April and May, were responsible for almost 50 per cent. of our Zymotic Deaths.

The following table gives the Ward distribution of these deaths.

Zymotic Deaths, showing Wards in which they occurred:—

Diseases.	North Ward.	South Ward.	East Ward.	West Ward.	Grange Ward.	Central Ward.	Total.
Whooping Cough ...	7	...	3	5	...	5	20
Measles ...	...	1	4	3	1	3	12
Diphtheria & Membranous Croup ...	2	1	2	2	...	2	9
Diarrhoea ...	1	1	1	...	1	1	5
Scarlet Fever ...	...	...	...	1	...	...	1
Enteric Fever ...	...	1	..	...	...	...	1
Smallpox ..	..	..	...	...	...	..	...
Total ..	10	4	10	11	2	11	48

It will be noted that Whooping Cough was most fatally prevalent in the North, West and Central Wards, and Measles in the East, West and Central. As regards Diphtheria, there was no fatal case in the Grange, and only one in the West, the fatality otherwise being equally distributed over the remaining Wards.

SCARLET FEVER.

There were only 27 cases notified as compared with 40 last year, and 55 the year previous. In spite of their being so few cases, the disease was constantly present with us, there not being a month in which a case was not reported. The highest number of cases in any one month, was in April, when 5 cases were reported; there were 4 in September and 3 each in the months of January and November. The following are the monthly notifications:—January, 3; February, 1; March, 1; April, 5; May, 1; June, 2; July, 2; August, 2; September, 4; October, 1; November, 3; December, 1. As regards the incidence of the disease, the following is the Ward distribution:—South, 10; Grange, 6; West, 5; East, 3; Central, 2; North, 1; the brunt of the disease being again practically confined to the better wards of the Borough. As regards the age attacks, 11 of the cases occurred in children between 1 and 5 years, 11 between 5 and 15 years, 4 between 15 and 25, and one over 25 years of age.

There was one death, equal to a death-rate of .02 per 1,000 of the population, being the same as that of last year. For the county the rate is .09, as compared with .07 the year previous.

Fifteen of the cases were removed to Hospital.

ENTERIC FEVER.

There were 16 cases notified as against 8 of last year. The cases occurred, 1 in January, 5 in March, 2 in April, 1 in May, 2 in July, 3 in August, 1 in October, and 1 in December; the Ward distribution being:—Central, 6; North, 4; South, 4; East, 1; Grange, 1; West, nil. Regarding the five cases in March, all of which occurred in the Central Ward; three of these occurred in one household, the first to develop the disease being a girl serving outside the Borough, who came home ill. Before medical advice had been obtained two more of the family had become infected, besides two from adjoining houses. All were removed to Hospital, and there were no further cases. Of the three cases in August, two were also contracted outside the Borough.

There was one death, equal to a "Fever" death-rate of .02, as compared with .05 last year. For the County the rate is .12, as compared with .18 the previous year. Thirteen of the cases were removed to Hospital.

DIPHTHERIA AND MEMBRANOUS CROUP.

There were 27 cases notified, 22 of Diphtheria and 5 of membranous Croup, as compared with 24 last year. March and October were the only months in which no case occurred. The cases were notified as follows:—January, 4; February, 6; April, 1; May, 2; June, 1; July, 1; August, 2; September, 3; November, 2; December, 5. The Ward distribution was as follows:—South, 9; West, 5; North, 5; Central, 4; East, 3; Grange, 1. As regards age attacks, the incidence of the disease was as follows:—Under 1 year, 1; 1—5 years, 10; 5—15 years, 8; 15—25 years, 2; 25—65 years, 6; less than one-third of the cases occurring in children of school-going age. The cases in this age group—5—15 years—occurred 1 in January, 3 in February, 1 in April, 1 in March, and 2 in December, showing that school life had little if any influence. How far this disease is spread by "carriers" is at present a moot point, though undoubtedly it has been propagated by such. In my opinion infection by these is quite exceptional. So far as our experience in Jarrow is concerned, ^{see next page.} deaths, equal to a death-rate of .25, as compared with .11 last year.

The case mortality was exceedingly high, there being 9) secondary cases occurring in a household is quite the exception, even in those houses where isolation, if not quite impossible, is at a minimum.

For the County the rate is .17, as compared with .18 last year.

WHOOPIING COUGH.

This disease was responsible for nearly half of our total zymotic mortality, causing no fewer than 20 deaths, equal to 41 per cent. of the whole. It was continuously present in the Borough, during the year, though in September and October no deaths occurred. The mortality was heaviest during the months of May, June and July, when 11 deaths were registered. The following is the monthly mortality:—January, 1; February, 1; March, 3; April, 1; May, 4; June, 3; July, 4; August, 1; November, 1; December, 1. Among the various Wards the deaths occurred as follows:—North, 7; West, 5; Central, 5; East, 3; Grange and South, nil. Owing to this and measles, the Infant Department of St. Bede's School was closed from March 22nd to April 18th.

The death-rate is .57, as compared with .11 last year. For the County the rate is .25, as against .53 last year.

MEASLES.

There were 12 deaths from this cause, as compared with 8 last year. The deaths occurred: 3 in February, 6 in April, 2 in May, and 1 in June. The brunt of the disease fell upon the East, West and Central Wards, the Ward mortality being—East, 4; West, 3; Central, 3; South, 1; Grange, 1; North, nil. It is rather remarkable that the North Ward, which had the heaviest mortality from Whooping Cough, should have entirely escaped any Measles fatality. Owing to the spread of the disease the Infant department of all the Schools had to be closed. Dunn Street School was the first most seriously affected, and its infant department was closed on March 8th until the 28th; the epidemic still continuing, this closing order, was afterwards extended to April 18th. On March 18th the Infant department of the Grange School was closed, and on the 22nd that of St. Bede's, whilst on the 29th these departments, in Croft Terrace, Ellison Street, St. Peter's, and Bede Burn Road Schools were closed—all until April 18th.

The death-rate was .34, as compared with .23 last year, the rates for the respective years for the County being .37 and .27.

DIARRHŒA.

There were only 5 deaths, four of which were in infants under one year, and one over 65 years of age. The deaths

occurred one each in the months of July, August, September, November and December, and also occurred one each in the North, South, East, Grange and Central Wards. Last year, there were 27 deaths from this cause.

The death-rate is .14, as compared with .77 last year, for the County the rate is .59 as against 1.44 last year.

ERYSIPELAS.

There were 23 cases notified, and two deaths registered, one of which occurred at Sedgefield Lunatic Asylum.

HOSPITAL.

The following table shows the admissions and recoveries at the Hospital during the year. There were no deaths.

Disease.	Admitted.	Recovered.	Died.	Mortality per cent. of Admissions.
Scarlet Fever	15	15	...	0
Enteric Fever	13	13	...	0
Total	28	23	...	0

The question of providing accommodation for Diphtheria, at the Hospital, has been under consideration for some time, but owing to the limited space for further building, and the proximity of the Small-pox Hospital, it has from time to time been deferred. Now that arrangements are practically completed by which the North-East Durham Joint Small-pox Hospital Board, to which we belong, take over the treatment of all cases of small-pox within their area at their Hospital at Whiteleas S. Shields, this difficulty is removed, and it only remains to see how far the present Small-pox Hospital can be utilised for treating Diphtheria, or whether an entirely new building should be substituted. Personally, I think the latter the only satisfactory course to adopt.

WARD MORTALITY.

Having considered the vital statistics of the Borough as a whole, they will now be taken up and dealt with as they occur in the various Wards. By this means the health conditions or otherwise prevailing in the Borough, can be better appreciated. In the following table the birth-rate, general death-rate, zymotic

death-rate, Phthisis death-rate, the death-rate from disease of the Respiratory System, excluding Phthisis, the Infantile Mortality Rate, as well as the percentage of deaths in infants under one year of age, are shown and contrasted for the various Wards.

In this table, the deaths of all residents occurring outside the Borough are included, these deaths being considered as having occurred in the Wards in which the patients resided previous to removal.

Births and Deaths, with respective Rates, according to Wards (Jarrow) 1909.

Ward.	Estimated Population.	Births and Birth-rate.	Total Deaths and Death-rate.	Zymotic Deaths and Death-rate.	Phthisis Deaths and Death-rate.	Deaths from Disease of the Respiratory System excluding Phthisis, & Death-rate.	Deaths of Infants under One Year with Percentage Mortality.	Infantile Mortality rate.
North	5030	168 33.3	107 21.2	10 1.9	11 2.1	34 6.7	28 26.1	166
South	7020	254 36.1	110 15.6	4 0.5	10 1.4	18 2.5	29 26.3	114
East	5110	158 30.9	91 17.8	10 1.9	5 0.9	25 4.8	36 39.5	227
West	6065	162 26.7	91 15.0	11 1.8	5 0.8	25 4.1	21 23.0	129
Grange	5720	103 19.0	57 9.9	2 0.3	3 0.5	11 1.9	6 10.5	55
Central	5370	173 29.4	122 20.7	11 1.8	8 1.3	38 6.4	32 26.2	181
Borough	34315	1024 29.4	578 16.1	48 1.3	44 1.2	151 4.3	152 21.2	148

Taking the general death-rate as a standard, the conditions in the various Wards may be briefly summed up as follows:

GRANGE WARD.

In this Ward the death-rate is only 9.9, as compared with 12.6 last year. All the other death-rates are correspondingly below the Borough average, the zymotic death-rate being 0.3 and the Infantile Mortality Rate 55.

WEST WARD.

Here the death-rate is 15.0, as compared with 15.5 last year. The Zymotic death-rate—1.8—is, however, higher than that for the Borough. All the other rates are lower, the Infantile Mortality rate being 129.

SOUTH WARD.

The death-rate in this Ward is 15.6, as compared with 13.7 last year. The Zymotic Rate is only 0.5, and with the exception of Phthisis—1.4—all the other rates are below the average. The Infantile Mortality Rate is 114.

EAST WARD.

Here the general death-rate is 17.8, as compared with 16.2 last year. The only rate below the Borough average is that of Phthisis—0.9. Its Infantile Mortality Rate—227—is the highest of all the Wards. Last year this rate was only 139.

CENTRAL WARD.

The general death-rate here is 20.7, as compared with 18.9 last year. All the other rates are also above the average, its Infantile Mortality Rate being 184, as compared with 163 last year.

NORTH WARD.

This from a health standpoint is the worst in the Borough, with a general death-rate of 21.2, as compared with 20.7 last year; the Infantile Mortality Rate being 166, as against 176 last year. All the other rates are above the average.

GENERAL SANITARY WORK.

There has a large amount of work been done in this connection, as will be seen by reference to Mr. Callis's Report which is appended. From this report it will be seen that no less than 1126 informal notices were served, either as statutory notices under the Public Health Acts, such as limewashing, cleansing, etc., or for breaches of these Acts. As regards the latter, the chief defects were in connection with house drainage, for which 163 notices were served, six of which were formal notices by order of the Sanitary Authority, all of which were complied with. For breaches in connection with dwelling houses, 121 notices were served, all in connection with foul conditions.

For further details in this connection, as well as for inspection of Lodging Houses, Dairies, Slaughter Houses, Precautions against Infectious Diseases, etc., see Inspector's Report.

HOUSE ACCOMMODATION.

This, as pointed out last year, is on the whole satisfactory and adequate, and with few exceptions quite fit for habitation. Owing to the macadamising of our back lanes, the surroundings of some of the most congested parts of the town have been much improved. These lanes are much more easily scavenged and do

not harbour dirt, refuse and damp, as the old cobble stones did. On the whole, the conditions, in and about the houses themselves, have in recent years improved, there not being the same difficulty with dirty and badly kept yards as there used to be. This has no doubt been prompted by doing away with most, if not all, of the badly bricked, or otherwise defective yards and cement substituted.

Fourteen dwellings were dealt with under the Housing of the Working Classes Act, 1890, and the conditions remedied. In four instances the dwellings were entirely reconstructed and much improved.

All new houses erected are under the supervision of the Borough Surveyor, and are built under bye-laws sanctioned by the Local Government Board.

DRAINAGE.

The district is well supplied as regards sewers and drains. There are four sewer outfalls into the river Tyne and three into the Don, into which the sewerage is sent direct. There are comparatively few water-closets in the Borough. The drainage is also satisfactory, and only in connection with faults and defects in yard gullies—too often brought about by negligence and carelessness on the part of the people themselves—does it give any trouble.

Removal and Disposal of House Refuse and Excrement. Scavenging.—The house refuse and excrement is removed from the earth closets once a week, by the Corporation contractor, and it is disposed of at sea. The scavenging of the town continues to be done in a most satisfactory manner.

PRIVY-ASHPITS.

The last two of these existing in the Borough were removed during the year, and box closets substituted.

Defective Yards and Back Street Paving.—Fifteen defective yards were dealt with and all properly cemented. In regard to the back streets, little or no work has been done during the year, in the way of further macadamising. There are, however, still some localities in which this ought to be carried out at as early a date as possible.

WATER SUPPLY.

This is supplied by the South Shields and Sunderland Water Coy. from Wells sunk in magnesian limestone. There is an ample supply of good quality with a constant service.

MILK SUPPLY.

This with one exception, comes all from outside the Borough. There were 27 samples taken, and all except one were satisfactory. In this case proceedings were taken against the vendor, but were dismissed on production of a warranty. The former was

then proceeded against, but the case was again dismissed, on the grounds of possible adulteration in transit. There are 70 milk shops and 5 dairies registered.

UNSOUND FOOD AND FOOD INSPECTION.

Food and Drugs Act.

There were 46 samples taken, and all with the exception of the milk case already referred to, found free from adulteration.

One carcase of beef was seized as being unfit for food, it being seriously and obviously affected with tubercle. The carcase was destroyed and the butcher fined £5 and costs for having it exposed for sale.

BAKEHOUSES.

There are nine in the Borough, all of which were inspected and found in good sanitary condition. There are no under-ground bakehouses.

LODGING HOUSES.

There are eleven of these in the Borough. During the year they were inspected by the Borough Surveyor and myself, and a report thereon was laid before the Sanitary Committee. In the course of our inspection it was very evident that some of these houses, owing to their very dirty condition, faulty construction, bad supervision, and various other defects, were totally unfit for the purpose. As a consequence a special committee was appointed, which is now dealing with the matter.

PUBLIC ELEMENTARY SCHOOLS.

These are all in a satisfactory condition. Owing to measles, and to a less extent Whooping Cough, the Infant Departments of all the schools were closed during the year, reference to which has already been made in this Report. This was only done after consultation and in conjunction with the School Medical Officer—Dr. Weir.

During the year Dr. Weir and myself met Dr. Eichholz, of the Board of Education, in connection with the allocating of the duties of the respective Departments. Little or no alteration was made or suggested, beyond what we had already been carrying out, and which has been found to work harmoniously and with benefit to the public health and well-being of those concerned.

FACTORY AND WORKSHOPS ACT, 1901.

There are 51 Workshops on the register, all of which have been inspected and with two exceptions found satisfactory. These were defective ventilation and defective sanitary accommodation, which was remedied. In two instances notices received from H.M. Inspector as to defective sanitary conveniences, were also remedied.

With regard to home workers, there are only three on the list, who are engaged in making wearing apparel, but whose employment is very irregular and spasmodic,

**TABLE 1.—Vital Statistics of whole District
during 1909 and previous years.**

1	Year.	Population estimated to Middle of each Year.	Births.		Deaths under One Year of Age.		Deaths at all Ages, Total.		Deaths in Public Institutions.	Deaths of Non- residents registered in District.	Deaths of Residents registered beyond District.	Deaths at all Ages. Nett.	
			No.	Rate.*	No.	Rate per 1,000 Births registered.	No.	Rate.*				No.	Rate.*
2	3	4	5	6	7	8	9	10	11	12	13		
1899	34169	1202	35.1	203	168	676	19.7	14	12	38	702	20.5	
1900	34227	1185	34.6	189	159	645	18.8	15	2	49	692	20.2	
1.01	34310	1170	34.1	185	158	612	17.8	12	1	47	658	19.1	
1902	34400	1241	36.0	181	145	648	18.8	15	4	36	630	19.7	
1903	34500	1200	34.7	185	154	570	16.5	12	2	45	613	17.7	
1904	34600	1087	31.4	168	154	595	17.1	12	5	56	646	18.6	
1905	34600	1131	32.6	162	143	530	15.3	1	1	64	593	17.1	
1906	34625	1109	32.0	165	148	572	17.2	7	4	56	624	18.0	
1907	34700	1157	33.3	141	121	508	14.6	3	2	60	590	16.1	
1866	34700	1159	33.4	151	130	496	14.2	4	1	65	566	16.1	
Averages for years 1899-1908	34483	1164	33.7	173	148	585	17.0	9	3	51	632	18.3	
	34815	1024	29.4	152	148	516	14.8	7	5	67	578	16.6	

*Rates calculated per 1 000 of estimated population.

Area of District in acres }
(exclusive of area } 936.
covered by water.) }

Total Population at all ages, 34,294..... }
Number of inhabited houses, 4,355..... }
Average number of persons per house, 5.03 } At Census
of 1901.

TABLE II.—Vital Statistics of separate Localities in 1903 and previous years.

Name of Locality.	North Ward.				South Ward.				East Ward.				West Ward.				Central Ward.				Grange Ward.				The Borough.				
	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.					
Year.	1899	5165	a	154	43	6128	...	115	33	5136	...	108	36	5983	...	113	22	6263	...	137	32	5332	...	75	21	...	...	702	201
	1900	5110	b	127	33	6565	...	95	21	5153	...	110	23	5936	...	118	27	5893	...	143	45	5404	...	98	29	3116	...	632	189
	1901	5056	c	116	32	6710	...	117	34	5130	...	102	23	6006	...	101	25	5925	...	152	42	5483	...	63	18	3430	...	638	185
	1902	5023	d	144	41	6849	...	97	33	5100	...	104	24	6020	...	121	42	5132	...	135	29	5583	...	81	15	3410	...	680	181
	1903	5020	not given by registrar.	108	33	6830	...	102	33	5100	...	83	31	6051	...	126	41	5860	...	111	31	5503	...	73	16	3430	...	615	183
	1904	5020	128	40	6830	...	123	42	5100	...	124	32	6050	...	108	25	5830	...	114	19	5643	...	69	14	3430	...	615	168	
	1905	5020	181	117	37	6930	267	118	41	5100	176	83	23	6050	193	103	23	5830	194	104	21	5443	140	58	16	3460	1131	583	162
	1906	5020	181	116	37	6930	259	111	27	5100	181	111	31	6050	193	93	23	5830	174	112	29	5335	135	51	14	3452	1109	621	156
	1907	5020	189	97	33	6930	239	108	15	5100	185	101	31	6050	194	86	19	5830	181	103	24	5310	135	51	17	3470	1137	580	151
	1908	5020	157	10	38	6930	217	95	25	5100	186	83	23	6050	194	91	20	5830	181	103	24	5310	135	51	17	3470	1159	580	151
Averages of Years 1899 to 1908	5047	...	121	38	6818	...	108	31	5117	...	101	22	6018	...	107	27	5931	...	122	30	5371	...	72	17	3443	...	632	173	
1909	5333	163	107	28	7020	234	110	23	5110	153	91	36	6055	172	91	21	5370	177	121	32	5721	100	57	6	433	1011	57	152	

TABLE III.—Cases of Infectious Diseases notified during the Year 1905.

Notifiable Disease.	Cases notified in Whole District.						Total Cases notified in each Locality							No. of Cases of removed to Hospital from each Locality.						
	At all Ages.	At Ages—Years.					North Ward.	South Ward.	East Ward.	West Ward.	Grange Ward.	Central Ward.	Total.	North Ward.	South Ward.	East Ward.	West Ward.	Grange Ward.	Central Ward.	Total.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.														
Small-pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria, including Membranous Croup....	27	1	10	8	2	6	5	9	3	5	1	4	..	..	..	..	..	..	..	..
Erysipelas	23	..	3	1	17	2	1	4	3	7	4	2	..	..	..	..	..	..	..	..
Scarlet fever	27	..	11	11	4	1	3	10	3	5	6	2	..	..	..	..	..	..	..	..
Typhus fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing fever	16	..	2	5	2	7	3	4	2	..	1	6	..	..	..	..	..	..	..	13
Continued fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Voluntary	31	..	2	4	10	11	11	4	..	4	..	8	..	..	..	..	..	..	..	..
Totals	126	1	28	29	37	30	1	25	31	15	21	12	22	3	10	5	1	3	6	28

Isolation Hospital—Primrose Hill Hospital situated a short distance outside Borough. Total available beds, 21; Number of diseases that can be concurrently treated, 3.

TABLE V.—Infantile Mortality during the Year 1909. Deaths from Stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under one Year.
All Causes.	{ Certified ... { Uncertified ...	33 8	11	7	2	53	14	14	5	6	7	5	10	2	7	2	11	136 16
Common Infectious Diseases.	{ Smallpox ... { Chicken-pox ... { Scarlatina ... { Measles ... { Diphtheria: Croup ... { Whooping Cough ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrheal Diseases.	{ Diarrhea, all forms ... { Enteritis ... { not Tuberculous ... { Gastritis, Gastro-intestinal Catarrh ...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	...	1	4 1
Wasting Diseases.	{ Premature Birth ... { Congenital Defects ... { Injury at Birth ... { Want of Breast Milk ... { Atrophy, Debility ... { Marasmus ...	20 4 1 1 13	4 1 ...	...	1	25 5 1	...	...	...	...	...	...	...	...	...	...	...	25 6 1 ...
Tuberculous Diseases.	{ Tuberculous Meningitis, Tuberculus Peritonitis, Tubes Mesenterica ... { Other Tuberculous Diseases ...	...	...	...	...	...	1	1	...	1	2	1	1	...	...	1	...	7 2
	{ Erysipelas ... { Syphilis ... { Rickets ... { Meningitis not Tuberculous ... { Convulsions ... { Bronchitis ... { Laryngitis ... { Pneumonia ... { Suffocating, overlaying ... { Other Causes ...	...	...	...	...	...	2	1	...	...	...	1	...	...	...	...	...	...
		41	11	7	2	61	14	17	5	7	7	5	11	3	8	3	11	152

District or sub-division of Jarrow.

Population
Estimated to middle of 1909
34,815

Births in the year { legitimate ... 990
 { illegitimate... 34
Deaths from all Causes at All Ages 578.

TABLE IV.—Causes of, and Ages at, Death during Year 1909.

Causes of Death.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).							Deaths in Public Institutions in District.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	North Ward	South Ward	East Ward	West Ward	Grange Ward	Central Ward.	Total.	
Small-pox ..	...	...	...	...	...	...	...	..	1	4	3	1	3	..	..
Measles ..	12	4	7	1	..	...	...	..	1	4	3	1	3	..	..
Scarlet fever ..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..
Whooping-cough ..	20	5	12	3	..	..	..	7	..	3	5	..	5	..	..
Diphtheria and membranous croup ..	9	1	7	1	..	..	..	2	1	2	2	..	2	..	..
Croup ..	2	1	1	..	..	..	..	1	..	..	1	..	..	..	..
Fever: (Typhus ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(Other continued ..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	3
Epidemic influenza ..	5	..	..	..	..	2	3	2	1	..	..	..	2	..	..
Cholera ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhoea ..	5	4	..	..	..	..	1	1	1	1	..	1	1	..	..
Enteritis ..	2	..	..	..	..	1	1	..	..	..	1	1	..	..	..
Puerperal Fever ..	2	..	..	..	..	2	..	..	1	..	1	..	..	..	..
Erysipelas ..	2	..	..	..	..	1	1	..	..	1	..	1	..	..	..
Other septic diseases ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis ..	44	..	4	3	11	25	1	11	10	5	5	5	8	..	..
Other tubercular diseases ..	35	10	14	4	2	4	1	4	8	10	3	4	6	..	..
Cancer, malignant diseases ..	25	..	..	..	..	17	8	3	8	3	2	4	5	..	..
Bronchitis ..	61	24	7	..	1	12	17	20	9	10	8	4	10	..	..
Pneumonia ..	82	22	28	2	5	19	6	11	8	15	16	4	25	..	..
Pleurisy ..	3	..	..	..	..	2	1	..	1	..	..	2	..	..	..
Other diseases of Respiratory organs ..	5	..	..	..	..	2	3	..	..	..	1	1	3	..	..
Alcoholism ..	2	..	..	..	..	2	..	1	..	..	1	..	..	..	..
Cirrhosis of liver ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Veneral diseases ..	5	5	..	..	..	..	..	..	1	1	1	..	2	..	..
Premature birth ..	25	25	..	..	..	..	..	3	7	3	4	1	7	..	..
Diseases and accidents of parturition. ..	3	..	..	..	1	2	..	1	1	..	..	1	..	..	..
Heart Diseases ..	49	..	..	1	3	31	14	8	9	8	5	9	10	..	..
Accidents ..	13	2	3	..	2	4	2	3	3	2	2	1	2	..	3
Suicides ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatic fever ..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..
Congenital Debility ..	37	37	..	..	..	..	..	4	8	9	7	2	7	..	..
Convulsions ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Apoplexy, Hemiplegia and Cerebral Hemorrhage ..	36	..	..	..	..	20	16	7	9	1	11	5	3	..	..
Marasmus ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningitis ..	5	..	1	3	1	..	..	..	1	1	..	1	2	..	..
All other causes ..	83	12	5	3	4	22	40	15	21	12	11	9	18	..	1
All causes..	578	152	90	21	30	170	115	107	110	91	91	57	122	..	7

TABLE VI.—Deaths occurring during the year 1909, in the Jarrow classified according to ages, disease, and the months in which they occurred.

AGES AT DEATH.						FATAL DISEASES.																					
Deaths at all Ages.						MONTHS.	Smallpox.	Scarlet Fever.	Diphtheria.	Membranous Group.	Continued Fevers.			Relapsing Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pleurisy, and Pneumonia.	Heart Disease.	Tubercular Disease other than Phthisis.	Injuries.	All other Diseases.	TOTAL.
Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 upwards.						Typhus.	Enteric or Typhoid.	Continued.														
152	90	21	30	170	115	578	Year....	1	5	4	1	...	...	2	...	...	12	20	5	1	44	146	49	35	13	238	578
16	7	...	1	12	10	46	January...	...	...	1	...	...	...	1	...	...	...	1	...	...	...	...	2	1	1	22	46
9	12	...	3	12	13	51	February...	...	2	2	...	...	...	...	1	...	...	1	...	...	...	...	2	3	1	32	51
16	10	...	4	25	13	70	March...	...	...	...	...	...	...	...	...	...	3	1	...	...	...	...	9	2	...	35	70
17	10	...	3	13	7	60	April...	...	...	...	...	...	...	...	...	...	6	...	...	1	...	...	5	3	2	17	60
12	12	...	6	15	15	60	May...	...	...	...	...	...	...	...	...	...	2	4	...	...	...	...	3	1	2	24	60
11	4	...	...	18	9	40	June...	...	...	...	...	...	...	...	...	1	3	...	...	...	...	...	3	1	2	23	49
8	2	...	...	12	8	33	July...	...	...	...	...	...	...	...	...	...	1	3	...	...	...	...	4	1	1	14	33
9	2	...	5	12	3	32	August...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	3	2	1	12	32
8	7	...	1	10	9	35	September...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	2	2	1	17	35
25	9	...	2	9	7	33	October...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	2	12	33
0	2	...	...	17	8	61	November...	...	2	...	...	...	...	...	...	...	...	1	...	...	...	...	5	3	0	19	61
12	4	...	2	15	13	48	December...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	3	1	1	21	48

Health Office during 1909

DISEASE.	1880.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Scarlet Fever...	...	1	1	5	1	2	2	2	4	1	3	2	27
Enteric Fever...	...	...	5	2	1	...	2	3	...	1	...	1	16
Diphtheria, including Membranous Group	...	6	...	1	2	1	1	2	...	4	2	5	27
Erysipelas ...	...	1	2	5	...	1	3	2	2	...	2	1	23
Puerperal Fever	...	...	2	...	...	...	...	...	...	...	...	...	2
Phthisis	7	2	6	6	2	...	2	...	...	3	3	...	31
Total	15	10	16	19	6	4	10	9	9	9	10	9	126

**ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR
1909, FOR THE BOROUGH OF JARROW.
FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES & HOMEWORK.**
1.—INSPECTION. Including Inspections made by Sanitary
Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections	Written Notices	Prosecut'ns
FACTORIES (Including Factory Laundries).	10	...	...
WORKSHOPS (Including Workshop Laundries)	70	...	...
WORKPLACES (Including other than Outworkers premises.)	3		
Total	83	...	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosec'ns.
	Found.	Rem'ied	Referred to H.M. Inspector.	
Nuisances under the Public Health Act.				
Want of Ventilation	1	1	...	...
Sanitary Accommodations—				
Insufficient ... ..	...	...	...	...
Unsuitable or defective	1	1	...	...
Not separate for sexes ... ..	...	...	...	...
Other Nuisances ... ..	...	...	...	...
Total	2	2	...	...

3.—HOMEWORK.

Outworkers' Lists, Section 107.				Number of Inspec- tions of Out- workers premi- ses.
Nature of Work.	Once in the year.		Numbers of Addresses of Out- workers forwarded to other Councils.	
	Lists.	Outworkers.		
Wearing Apparel- making, &c. ...	3			3

4.—REGISTERED WORKSHOPS.

Class.	Number.
Workshops on the Register (s. 131) at the end of the year.	
Millinery and Dressmaking	10
Tailoring	6
Bakehouses	9
Laundries	6
Others	20
Total number of Workshops on Register	51

5.—OTHER MATTERS

Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)	Notified by HM Inspector ..	2
	Reports (of action taken) sent to HM Inspector ...	...

I.—Summary of Work done in the Inspector of Nuisances' Department during the Year 1909, in the Urban Sanitary District of Jarrow.

I.—PUBLIC HEALTH ACTS.	No. of Informal Written Notices by Inspector.	No. of Formal Notices by order of Authority.	No. of Nuisances abated after Notice.	General Remarks.
Dwelling-houses and Schools—				
Foul Conditions	121	..	121	
Structural Defects .. .. .	..	..	..
Overcrowding .. .. .	..	..	..
Lodging-houses, To Linewash etc.	22	..	22	
Dairies and Milkshops, all kept under observation and found in order	12	1	12	
Cowsheds	1	1	1	
Bakehouses, seven in number, all inspected and found in order ..	14	..	14	
Slaughter-houses To Linewash	46	..	46	
Ashpits and Privies .. .. .	..	..	2	Ashpits and Privies: 2 Privy ashpits removed. Ash-pit privies now nil.
Deposits of Refuse and Manure	67	..	67	
Water Closets	29	29	29	Water Closets: 15 box closets removed and water closets substituted.
Defective Brick Yard Paving— all cemented	15	..	15	
House Drainage—				
Defective Traps	6	..	6	
No disconnection from Sewers	1	..	1	
Other Faults	156	6	156	
Water Supply	8	..	8	
Pigsties	2	..	2	
Animals Improperly Kept ..	1	1	1	
Offensive Trades .. .. .	..	..	..
Smoke Nuisances	2	2	2	
Other Nuisances	623	12	623	Other Nuisances consist of repairs to box closets, broken close hatches, and lime-washing passages, staircases, &c.
Totals	1126	52	1128	

II.—Inspector's Report.

II.—HOUSING OF THE WORKING CLASSES ACT, 1890.	No.	Remarks.
Formal Notices served 14 Dwellings dealt with 14 Dwellings made habitable after formal notice 14 Closing Orders applied for Closing Orders granted by Magistrates Dwellings permanently closed		In 4 instances the houses underwent a general reconstruction.
Number of Houses erected during the year 15 Number of such houses occupied during the year 10		Being 10 self-contained flats and 10 self-contained houses.
IV.—WATER, FOODS AND DRUGS. Samples of Water taken for analysis Samples of Water condemned as unfit for use Seizure of Unwholesome Food 1 Convictions for exposing or selling unwholesome Food 1 Samples of Food and Drugs taken for Analysis 46 Samples of Food found Adulterated 1		One carcase of beef seized and destroyed, it being tuberculous. The butcher summoned and fined £5 and costs for exposing for sale. The case dismissed.
V.—PRECAUTIONS AGAINST INFECTIOUS DISEASE. Lots of infectious bedding stove-d or destroyed 202 Houses disinfected after Infectious Disease... 202 Schools do. do. do. .. 14 Prosecutions for exposure of infected persons or things Convictions for do. do. do. ..		All houses and schools disinfected by the Formaline process, and disinfectants supplied free for the cleansing of houses, &c.

JOHN S. CALLIS, INSPECTOR OF NUISANCES

February 1st, 1910.